



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

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SECRETARY

MEMORANDUM TO: Project Engineers  
Project Design Engineers

FROM: G. R. Perfetti, P. E.  
State Bridge Design Engineer

DATE: July 6, 2006

SUBJECT: B-77 GUARDRAIL ANCHOR UNIT

Effective with the November 2006 letting, the Roadway Design Unit will be implementing the use of the B-77 guardrail anchor unit (GRAU) for use on bridges with a New Jersey barrier rail. Since the B-77 GRAU attaches to the New Jersey barrier rail on the bridge, Structure Design shall show the anchor assembly details on the structure plans. To this end, a new Structure Standard drawing -- GRA2 has been developed and is available for your use.

For projects where the letting date has been postponed until after the above effective date, the plans shall be revised where it is practical. To ensure consistency in the plans, the Structure Design Project Engineer should coordinate any revisions with the Roadway Design Project Engineer.

Note that bridges detailed with the B-77 GRAU will require an approach slab that is narrower in width than approach slabs detailed with a barrier rail transition. Other revisions required include the top of backwall elevations and the location of the backwall blackout.

The Design Manual will be updated at a later date.

GRP/GM/snj

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